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| 10/563,709                       | 01/06/2006                            | Jurgen Schmidt       | PD030076            | 1607             |
|                                  | 7590 10/19/2007<br>KS, VICE PRESIDENT |                      | EXAM                | INER             |
| THOMSON L                        | CENSING LLC                           |                      | RAHMAN, MOHAMMAD N  |                  |
| PATENT OPERATIONS<br>PO BOX 5312 |                                       |                      | ART UNIT            | PAPER NUMBER     |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.  | Applicant(s)  |  |  |
|---|--|---|--|--|
|   | 10/563,709   | SCHMIDT, JURGEN   |  |  |
| Office Action Summary   | Examiner   | Art Unit  |  |  |
|   | Mohammad N. Rahman   | 2161  |  |  |
| The MAILING DATE of this communication app Period for Reply   | ears on the cover sheet with the c   | orrespondence address   |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become AB ANDONE   | N.<br>nely filed<br>the mailing date of this communication.<br>D (35 U.S.C. § 133). |  |  |
| Status  |  |   |  |  |
| 1)  | action is non-final.<br>nce except for formal matters, pro   |   |  |  |
| Disposition of Claims   |  |   |  |  |
| 4)  Claim(s) 1-10 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-10 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or  Application Papers  9)  The specification is objected to by the Examine.  10)  The drawing(s) filed on 06 January 2006 is/are:  Applicant may not request that any objection to the ore Replacement drawing sheet(s) including the correction.   | wn from consideration.  r election requirement.  r.  a) ⊠ accepted or b) □ objected drawing(s) be held in abeyance. Se ion is required if the drawing(s) is objected the drawing(s). | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                                |  |  |
|   |  |   |  |  |
| Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |  |   |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 01/06/2006.   | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:  | ate   |  |  |

#### **Detailed Action**

## **Preliminary Amendment**

The preliminary amendment filed on 01/06/2006 has been entered. Claims 1, 4-8, 10 have been amended.

### Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 2. Claims 1, 2, 4 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim 1, recites a method for decoding data stream, however, the body of the claim does not recite any steps to be performed. In line 3-5, "the second substream containing control information, wherein the multimedia data packets contain an indication of the time when to be presented" only describes the present of the substream but does not clearly mention the corresponding steps of the decoding data packets.

The claim 8, also recites an apparatus for decoding data stream, however, the body of the claim does not recite any steps to be performed. In line 5-6, "wherein the first and second multimedia data packets are buffered" does not clearly describe the corresponding steps for the procedure of the apparatus, which is being used in order to buffer the multimedia data packets.

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Furthermore, in claims 1, 2, 4 and 8, it's unclear whether the limitation inside the () are part of the claims.

#### Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material." Abstract ideas, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457 58, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but. is not limited to music, literary works and a compilation or mere arrangement of data (See MPE P se ct ion 2 106, IV, B, 1)

4. Claims 1-7 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

The claims are rejected as falling under the judicial exception of an abstract idea which lacks a useful, concrete, and tangible result. A claimed series of steps or acts that do not result in a useful, concrete, and tangible result are not statutory within the meaning of 35 USC 101. In the instant case, the claims recite, "containing," "replacing," and "defining." However, no useful, concrete, and tangible result is claimed. For example, "writing said data," "updating said data," "sending said data" being claimed at the end of the claim may comprise a useful, concrete, and tangible result. Absent such a result, however, the claims are not statutory.

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best, functional descriptive material per se.

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The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at

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Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Claim Rejection – 35 USC § 102

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-7 are rejected under 35 U.S.C. 102 (b) as being anticipated by Fujinami (U.S. Patent Number: 5,502,573), herein referred to as Fujinami.

As to claim 1, Fujinami teaches, Method for decoding a data stream, the data stream containing a first and a second substream (col.1 and lines 53-57), the first substream containing first and second multimedia data packets and the second substream containing control information (col. 3 and lines 12-14), wherein the multimedia data packets contain an indication of the time when to be presented and are decoded prior to the indicated presentation time, and wherein the first decoded multimedia data packets are buffered at least until, after a further processing, they can be presented in due time, and the second multimedia data packets are also buffered, wherein the second multimedia data packets either replacing or being appended to the first decoded multimedia data packets in the buffer (abstract, lines 1-16);

(Fujinami teaches, "The video buffer also is connected to a video decoder which decodes the video data temporarily stored in the video buffer, the operation of the video decoder being controlled as a function of a comparison between the generated timing data and the extracted video time data (abstract, lines 11-16)" and

"the video and audio data are demultiplexed from the pack illustrated in FIG. 7, and supplied to respective video and audio decoders (col.1 and lines 56-58)", which clearly describes that the buffer contains the multimedia data packets and the data stream is being decoded within a specific time.)

"said control information containing first, second and third control data" at col. 3
 and lines 12-14;

(Fujinami teaches, "a control circuit 28, which may be a central processing unit, coupled to data separator 21 to supply various control command signals thereto", which interprets that the buffer contains the control information and the control circuit processes control data.)

 "the first control data (Length) defining the allocated buffer size" at col. 2 and lines 28-32;

(Fujinami teaches, "the error corrected digital data then is supplied to ring buffer 4 which stores such data until a predetermined amount is accumulated" which defines that for allocating control data, the buffer size is predetermined)

 "the second control data (LoadMode) defining whether the second multimedia data packets are appended to the first multimedia data packets or replace them" at col. 12 and lines 50-54; (Fujinami teaches, "the video decoder skips to the next unit of video data to be loaded into video buffer 6A" which interprets that the video decoder identifies, appends and loads the data packets.)

 "and the third control data (StartLoadTime, StopLoadTime) defining one or more multimedia data packets to be buffered" at col. 1 and lines 28-35.

(Fujinami teaches, "a system clock reference SCR follows the PACK START CODE and represents a time code corresponding to the time at which the pack was recorded", since the control data contains, data packets that includes start and stop load time.)

As to claim 2, Fujinami teaches, "method according to claim 1, wherein the second control data (LoadMode) defines one of a plurality of operation modes, wherein in a first mode buffering of multimedia data packets is performed when the value of the first control data (Length) changes, and in a second and third mode the third control data (StartLoadTime, StopLoadTime) are valid for specifying the multimedia data packets to be buffered, wherein in the second mode the multimedia data packets replace the buffer contents and in the third mode the multimedia data packets are appended to the buffer contents" at col. 1 and lines 46-67 and col. 2 and lines 1-2.

As to claim 3, Fujinami teaches, "method according to claim 2, wherein the third mode has two variations, wherein in the first variation the buffering of multimedia

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data packets stops when the buffer is full, and in the second variation previously buffered data may be overwritten when the buffer is full" at col. 3 and lines 33-43 and col. 3 and lines 43-53.

As to claim 4, Fujinami teaches, "method according to claim 1, wherein the method is utilized in an instance of a processing node and wherein the first control data (Length) defines the allocated buffer size at node creation time" at col. 8 and lines 26-50.

As to claim 5, Fujinami teaches, "method according to claim 1, wherein labels are attached to the buffered first and other multimedia data packets, and the packets may be accessed through their respective label" at col. 1 and lines 46-53.

As to claim 6, Fujinami teaches, "method according to the claim 5, wherein a label attached to the buffered data packets contains an index relative to the latest received data packet" at col. 1 and lines 46-60.

As to claim 7, Fujinami teaches, "method according to claim 1, wherein the first substream contains audio data and the second substream contains a description of the presentation" at col. 1 and lines 43-46.

## Claim Rejection – 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 8-10, are rejected under 35 U.S.C. 102 (e) as being anticipated by Jebb et al. (U.S. Application Publication No. 2005/0120038 A1), herein referred to as Jebb.

As to claim 8, Jebb teaches, "apparatus for decoding a data stream, the data stream containing a first and a second substream, the first substream containing first and second multimedia data packets and the second substream containing control information, wherein the multimedia data packets contain an indication of the time when to be presented and wherein the first and second multimedia data packets are buffered, containing buffering means for said buffering of the first and the second multimedia data packets, wherein the second multimedia data packets may in a first mode replace and in a second mode be appended to the first multimedia data packets" at paragraph [0052], lines 1-10 and paragraph [0077], lines 1-6;

(Jebb teaches, "this will allow the client 40 to start decoding and presenting media to the user immediately at the point that data is received and decoded (paragraph [0052], lines 1-10)" and "buffered in the decoding buffer 41, it is necessary for decoding of data to be correctly timed (paragraph [0077], lines 1-6)" which clearly describes that the buffer contains the multimedia data packets and in a specific mode, the data stream is being decoded within a respective time.)

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 "means for extracting from said control information first, second and third control data" at paragraph [0017], lines 1-7;

(Jebb teaches, "the data source including a plurality of encoded data streams" which interprets that the plurality of the control data is being extracted for streaming.)

 means for applying the first control data (Length) to define the allocated buffer size" at paragraph [0009], lines 1-7;

(Jebb teaches, "video stream match the average available bandwidth the receiver buffer size", since the buffer contains the control data according to it's size.

 "means for applying the second control data (LoadMode) to define whether the second multimedia data packets are appended to the first multimedia data packets or replace them" at paragraph [0085], lines 1-8; and

(Jebb teaches, "it must find a point in the intra stream, and start streaming from it", since the multimedia data in the packets are appended for streaming and the control data contains different mode of functions)

means for applying the third control data (StartLoadTime, StopLoadTime) to
 define a multimedia data packet to be buffered (at paragraph [0102], lines 1-8).

(Jebb teaches, "the server also needs to know the timestamp of the data packet that the client is currently decoding and presenting" since in order to multimedia data packet to be buffered, the control data maintains a start and stop point of the loading time.)

As to claim 9, Jebb teaches, "apparatus according to claim 8, further comprising means for attaching labels to the buffered multimedia data packets, and means for accessing, retrieving or deleting the packets through their respective label" at paragraph [0110], lines 2-8.

As to claim 10, "apparatus according to claim 8, wherein the data stream is an MPEG-4 compliant data stream" at paragraph [0006], lines 1-4.

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cotarmanac'h (US Application Publication No. 2006/0136440) discloses a dependent data stream transmission procedure.

Otsuka et al. (US Patent No. 6,263,089) discloses a method and equipment for extracting image features from image sequence.

Puri et al. (US Patent No. 6,148,026) discloses a method and apparatus for coding video data permits coding of video information with optional, enhanced functionalities.

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Henry (US Patent No. 5,436,664) discloses a method for masking transmission errors of MPEG compressed pictures.

#### **Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad N. Rahman whose telephone number is 571-270-1631. The examiner can normally be reached on 7:30am - 5:00 pm, Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mofiz Apu M can be reached on 572-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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